

MULTIPLE CHOICE QUESTION PAPER

Paper number: SAMPLE 5 Please ensure that this paper number is referenced on your candidate answer sheet	Time allocation: 45 minutes
Title: <p style="text-align: center;">Level 2 Anatomy and Physiology for Exercise and Fitness Instructors (K/616/7823) - Sample Assessment Materials</p>	
Student: XXXXXX Sample 5	
Special Instructions: <p>This asample sssessment contains 30 multiple-choice questions. You need to correctly answer 21 out of 30 questions (70%) to pass.</p> <p>Each question is worth one mark. You should select one response (a, b, c or d) for each question and record this on your answer sheet. Please do not write on the question paper.</p> <p>Try to answer all questions and check your responses, if you have time to do so.</p>	

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- Q1** The aerobic energy system is used for
- a) instantaneous bursts of activity lasting for just a few seconds
 - b) very quick bursts of high-intensity activity, lasting on average less than a minute
 - c) sustained activity lasting more than 90 s
 - d) longer duration activities and exercise involving maximum efforts
- Q2** Which of the following is a muscle associated with the pelvic floor?
- a) Iliococcygeus
 - b) Pectineus
 - c) Piriformis
 - d) Iliopsoas
- Q3** Which of the following are part of the systemic circulatory system?
- a) The left ventricle and the aorta
 - b) The right ventricle and the aorta
 - c) The right ventricle and the pulmonary arteries
 - d) The left ventricle and the pulmonary arteries
- Q4** Which of the following statements about the nervous system is true?
- a) Blood pressure is controlled by the somatic system
 - b) Skeletal muscle contraction is controlled by the parasympathetic nervous system
 - c) Skeletal muscle contraction is controlled by the sympathetic nervous system
 - d) Blood pressure is controlled by the autonomic system
- Q5** Which of the following is an example of a flat bone?
- a) Clavicle
 - b) Scapula
 - c) Ischium
 - d) Patella

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- Q6** Which of the following correctly describes the process of diffusion in the lungs?
- a) Diffusion involves the movement of oxygen into the capillaries to be expelled by the lungs
 - b) Diffusion is the movement of molecules from an area of lesser concentration to an area of higher concentration
 - c) Diffusion involves the movement of carbon dioxide into the capillaries to be used by the body
 - d) Diffusion is the movement of molecules from an area of greater concentration to an area of lesser concentration
- Q7** Which of the following statements about the structure of the heart is true?
- a) The ventricles are the smaller, inferior chambers
 - b) The ventricles are the smaller, superior chambers
 - c) The ventricles are the larger, superior chambers
 - d) The ventricles are the larger, inferior chambers
- Q8** Which of the following describes the function of the aorta?
- a) It carries deoxygenated blood to the lungs
 - b) It carries oxygenated blood to the body
 - c) It carries oxygenated blood to the heart
 - d) It carries deoxygenated blood to the heart
- Q9** How does fluid intake aid the digestive process?
- a) It helps to dissolve saturated fat
 - b) It assists with the removal of waste products
 - c) It reduces chemical processes
 - d) It helps to dissolve insoluble fibre
- Q10** Which of the following statements about joint classification is true?
- a) The knee is an example of a cartilaginous joint
 - b) The ankle is an example of a freely moveable joint
 - c) The thumb is an example of a cartilaginous joint
 - d) The lumbar spine is an example of a synovial joint
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- Q11** Which of the following describes how exercise can enhance neuromuscular connections?
- a) It can reduce the speed of nerve impulses
 - b) It can increase the number of smaller motor units
 - c) It can reduce the number of smaller motor units
 - d) It can increase the speed of nerve impulses
- Q12** Which of the following statements about the structure of long bones is true?
- a) They store calcium in the medullary cavity at their centre
 - b) The main bone shaft of a long bone is the epiphysis
 - c) The two ends of the long bone are the diaphysis
 - d) They are covered by a connective tissue called the periosteum
- Q13** Which of the following describes neutral spine alignment?
- a) When the spine is in neutral there is natural lordosis of the thoracic and sacral spine
 - b) When the spine is in neutral there is natural kyphosis of the lumbar and cervical spine
 - c) When the spine is in neutral alignment there is a mild S-shaped curve
 - d) When the spine is in neutral alignment there is an emphasised S-shaped curve
- Q14** Which of the following describes a function of the skeleton?
- a) The irregular bones act as strong attachment points for muscles
 - b) The flat bones act as a levers for movement
 - c) The long bones act as a levers for movement
 - d) The short bones act as strong attachment points for muscles
- Q15** Which of the following describes how blood moves through the four chambers of the heart?
- a) Deoxygenated blood from the left atria moves to the left ventricle
 - b) Oxygenated blood from the left atria moves to the right ventricle
 - c) Deoxygenated blood from the left atria moves to the right ventricle
 - d) Oxygenated blood from the left atria moves to the left ventricle
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Q16 Which of the following describes gaseous exchange?

- a) Carbon dioxide moves from the alveoli into the pulmonary capillaries to be circulated around the body
- b) Carbon dioxide moves from the pulmonary capillaries into the alveoli to be circulated around the body
- c) Carbon dioxide moves from the alveoli into the pulmonary capillaries to be expelled
- d) Carbon dioxide moves from the pulmonary capillaries into the alveoli to be expelled

Q17 The entire muscle is surrounded by a broad protective fibrous sheath called the

- a) sarcomere
- b) myofibril
- c) endomysium
- d) epimysium

Q18 Which of the following describes the bronchi?

- a) They are extensions from the trachea that carry air into the lungs
- b) They are extensions from the bronchioles that carry air into the lungs
- c) They are the small air sacs at the end of the bronchioles
- d) They are the small air sacs where gaseous exchange takes place

Q19 Which of the following correctly describes the structure of synovial joints?

- a) Muscles move joints via ligament attachment
- b) The synovial membrane prevents excessive movement
- c) Ligaments attach bone to bone
- d) The articular cartilage provides lubrication

Q20 Which of the following describes the curves of the spine?

- a) The cervical spine has a natural outward curve
- b) The lumbar spine has a natural outward curve
- c) The thoracic spine has a natural inward curve
- d) The lumbar spine has a natural inward curve

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- Q21** Which of the following is a **superficial** muscle located posterior to the femur?
- a) Adductors
 - b) Quadriceps
 - c) Soleus
 - d) Hamstrings
- Q22** Which of the following is a function of skeletal muscle?
- a) Assists digestion
 - b) Generates heat
 - c) Restricts movement
 - d) Prevents stability
- Q23** Which of the following explains the importance of minerals in the process of bone growth?
- a) Magnesium is the most important mineral during the process of bone growth
 - b) Iron is the most important mineral during the process of bone growth
 - c) Calcium is the most important mineral during the process of bone growth
 - d) Sodium is the most important mineral during the process of bone growth
- Q24** Which of the following describes a principle of muscle contraction?
- a) Muscles work in isolation to create movement
 - b) During muscle work, both the agonist and antagonist contract
 - c) During muscle contraction, it is only the origin of the muscle that moves
 - d) Muscles can only pull on bones to create movement
- Q25** Which of the following describes pronation and supination?
- a) Pronation and supination are movements of the wrist joint
 - b) Pronation and supination are movements of the hip joint
 - c) Pronation and supination are movements of the radioulnar joint
 - d) Pronation and supination are movements of the ankle joint

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- Q26** Which of the following should be encouraged with post-natal clients when first returning to exercise?
- a) High-impact training
 - b) Heavy resistance training
 - c) Strengthening pelvic floor muscles
 - d) Full sit-ups
- Q27** Which of the following describes motor unit recruitment?
- a) If exercise intensity is high, only larger motor units will be recruited
 - b) If exercise intensity is low, only larger motor units will be recruited
 - c) Smaller motor units are recruited first, then larger motor units
 - d) Larger motor units are recruited first, then smaller motor units
- Q28** Which of the following describes the range of motion available at a synovial joint?
- a) Flexion and extension are movements available at pivot joints
 - b) Abduction and adduction are movements available at hinge joints
 - c) Flexion and extension are movements available at hinge joints
 - d) Abduction and adduction are movements available at pivot joints
- Q29** Which of the following muscles is located laterally to the spine?
- a) Rectus abdominus
 - b) Erector spinae
 - c) Obliques
 - d) Pelvic floor
- Q30** Which of the following describes an isotonic contraction?
- a) The length of the muscle changes throughout the movement
 - b) The joint angle remains fixed and unchanged during muscle contraction
 - c) The tension in the muscle is constant throughout the movement
 - d) The speed of the movement is constant during muscle contraction
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Sample Assessment

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Important! The form should be completed IN CAPITAL LETTERS using a BLACK ballpoint pen. Characters and marks used should be similar to:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6 7 8 9 0

To select a checkbox:

or

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This candidate answer sheet must be used with a paper in the following structure:

30 Questions

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Site Code: SAM001/001 Assessment Date: 01/03/2018

Paper: Sample 5

Student: XXXXXX Sample 5

Q1 a b c d

Q2 a b c d

Q3 a b c d

Q4 a b c d

Q5 a b c d

Q6 a b c d

Q7 a b c d

Q8 a b c d

Q9 a b c d

Q10 a b c d

Q11 a b c d

Q12 a b c d

Q13 a b c d

Q14 a b c d

Q15 a b c d

Q16 a b c d

Q17 a b c d

Q18 a b c d

Q19 a b c d

Q20 a b c d

Q21 a b c d

Q22 a b c d

Q23 a b c d

Q24 a b c d

Q25 a b c d

Q26 a b c d

Q27 a b c d

Q28 a b c d

Q29 a b c d

Q30 a b c d

Invigilator Name (must be clearly printed)

Invigilator Signature (Please keep inside box)

Candidate Signature (Please keep inside box)

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Sample Assessment

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